or establishment costs and the annual costs incurred thereafter. These establishment costs can be thought of as an up-front investment that must be allocated over the life of the crop.

Examples are provided in the following tables, based on the NCSU enterprise budgets. Costs are based on practices recommended by North Carolina Cooperative Extension forage specialists and reflect 2006 prices in North Carolina. Costs are based North Carolina conditions, assuming normal weather, typical soil types, and current production technology. Enterprise budgets are only guidelines and should be carefully evaluated and modified for your specific farm situation. They are not intended to be used "as-is." These and other North Carolina enterprise budgets are revised periodically. Ask for a current enterprise budget at your county Extension center or visit the Department of Agricultural and Resource Economics at NC State University online at http://www.ag-econ.ncsu.edu/extension/Ag_budgets.html.

The costs presented in Tables 1 through 3 are defined as follows:

- **Materials and services** include seed, seed

Table 1. Estimated establishment cost per acre for selected perennial crops in North Carolina, 2006.

Forage crop	Materials and services	Labor	Machine operating	Machine ownership	Total cost per acre[a]
	$				
Cool season perennial grasses[b]	165.63	7.80	7.76	14.16	195.35
Hybrid bermudagrass	279.28	24.19	24.93	30.39	358.78
Ladino clover and cool season perennial grass	183.79	7.80	7.27	14.16	213.01
Switchgrass	192.39	16.87	17.46	29.33	256.05

[a] Bermudagrass and switchgrass normally produce some usable forage during the establishment year, which can partially offset the establishment cost. The costs shown in this table are the full costs, with no allowance for the value of any production. Fall-sown cool season grasses do not produce a significant yield of usable forage in the establishment year. Items may not add to totals because of rounding.
[b] For example, orchard grass or tall fescue. Seed for endophyte-friendly tall fescue costs more.

Source: Enterprise Budget Guidelines, Department of Agricultural and Resource Economics, NC State University.

Table 2. Estimated annual cost of production per acre for selected annual and perennial forages, 2006.

Crop	Materials and services	Labor	Machine operating	Ownership[a]	Total cost per acre[b]
	$				
Bluegrass and white clover for pasture	70.07	4.87	4.34	9.21	88.49
Cool season grasses for pasture	106.32	9.73	8.69	54.17	178.91
Ladino clover and cool season perennial grass for pasture	55.56	9.73	8.69	60.87	134.86
Hybrid bermudagrass for pasture	127.11	9.73	8.69	42.65	188.18
Summer annuals for pasture	136.98	8.52	8.85	11.03	165.38
Winter annuals for pasture	117.25	10.59	10.52	11.00	149.37
Switchgrass for hay and pasture	85.29	20.60	22.01	48.98	176.88
Hybrid bermudagrass for hay (round bales)	183.01	58.49	62.13	103.43	407.06
Corn silage	195.23	42.17	47.68	92.19	377.27
Small grain silage	130.81	42.02	41.06	88.55	302.44

[a] Includes the amortized cost of establishment of perennial crops.
[b] Items may not add to totals because of rounding.

Source: Enterprise Budget Guidelines, Department of Agricultural and Resource Economics, NC State University.

Table 3. Hay harvesting costs, per cutting per acre, 2006.

Harvest method	Yield, per cut per acre	Materials and services	Labor	Machine operating	Ownership	Total cost per ton of dry matter[a]
	tons of dry matter	$				
Hay, small square bales	1.0	4.28	22.85	23.21	25.75	76.09
Hay, large round bales	1.0	2.79	18.99	20.16	22.36	64.28

[a] To convert cost from a dry matter basis to an "as made" basis, multiply this cost by the dry matter percentage of the hay. Items may not add to totals because of rounding.

Source: Enterprise Budget Guidelines, Department of Agricultural and Resource Economics, NC State University.